

Figure 1
Prior Art Example 1, Typical Quench Gasifier Design with
Conical or Funnel Shape Throat

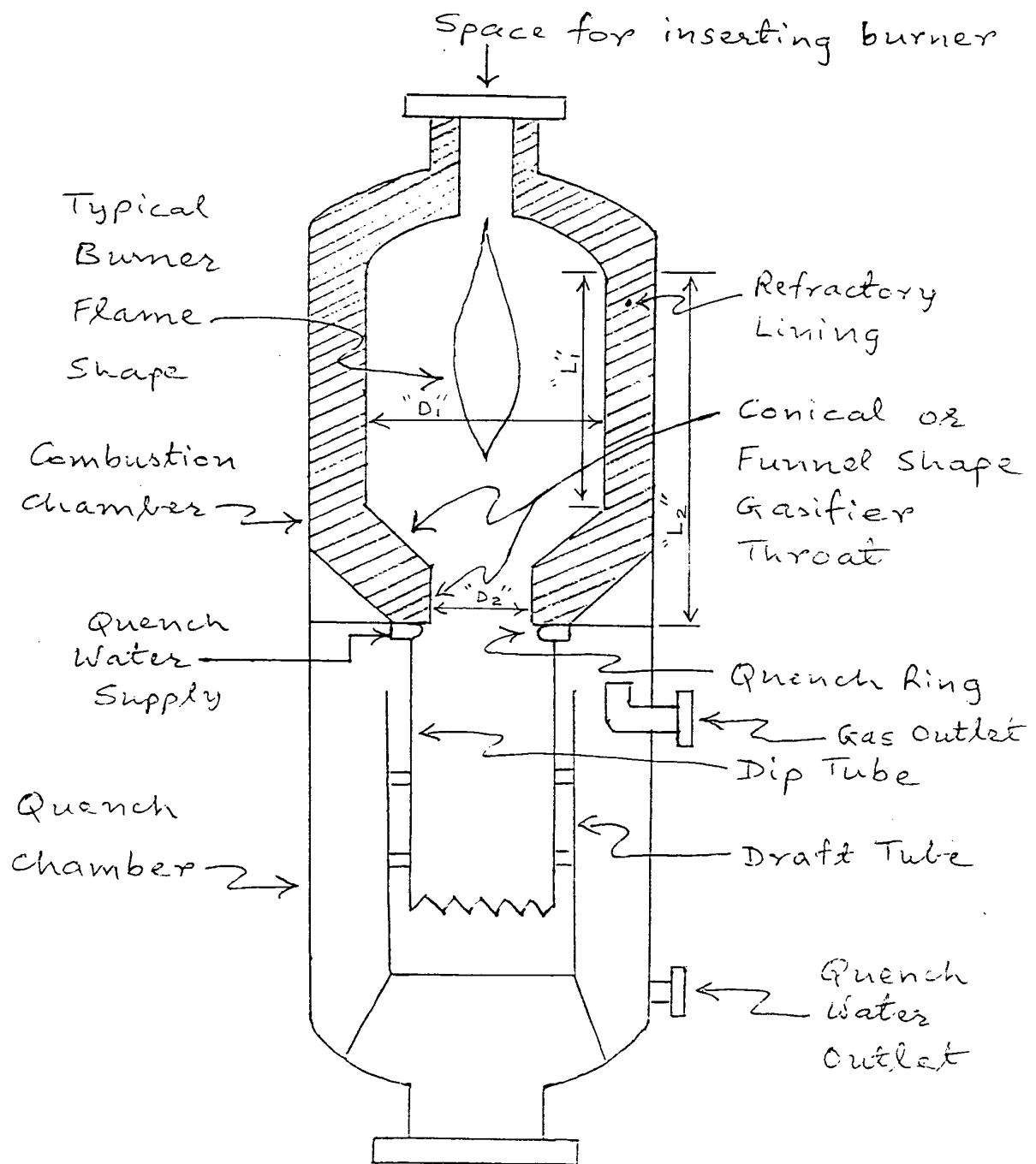


Figure 2
Prior Art Example 2, Typical Quench Gasifier Design with
Wind Tunnel Shape Throat

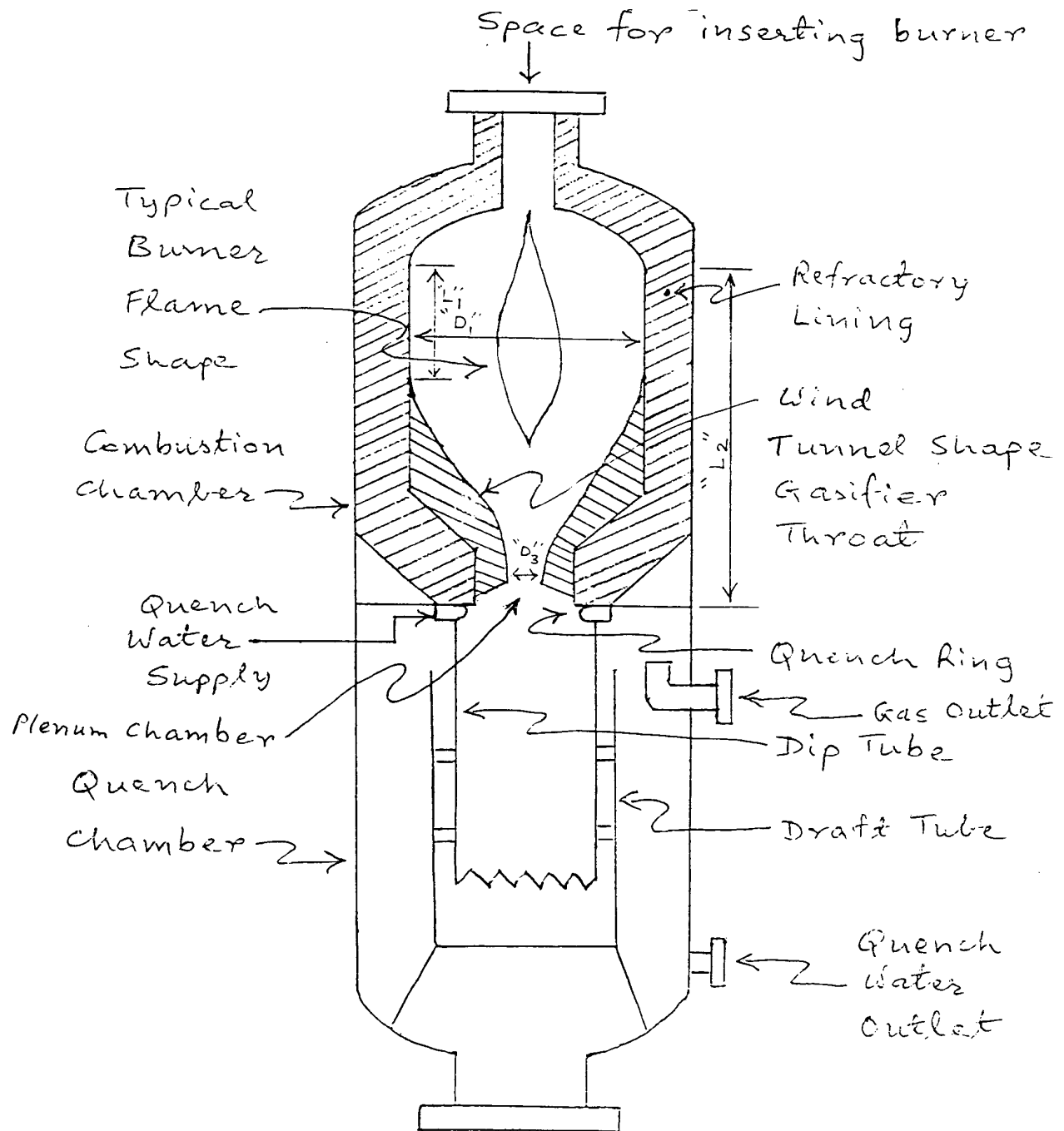


Figure 3
New Art Example, New Quench Gasifier Design with
Electrical Heating of the Throat Area

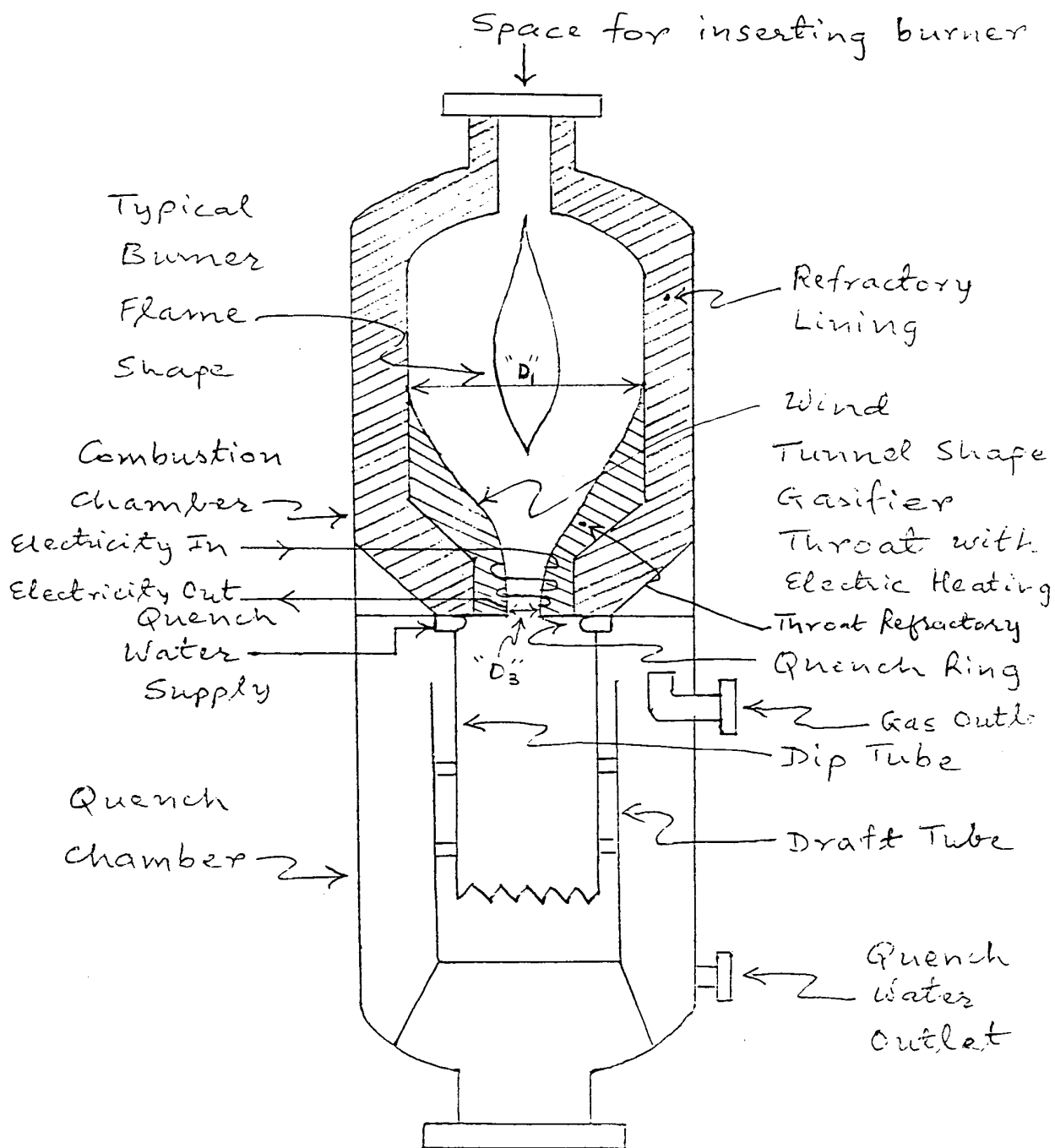
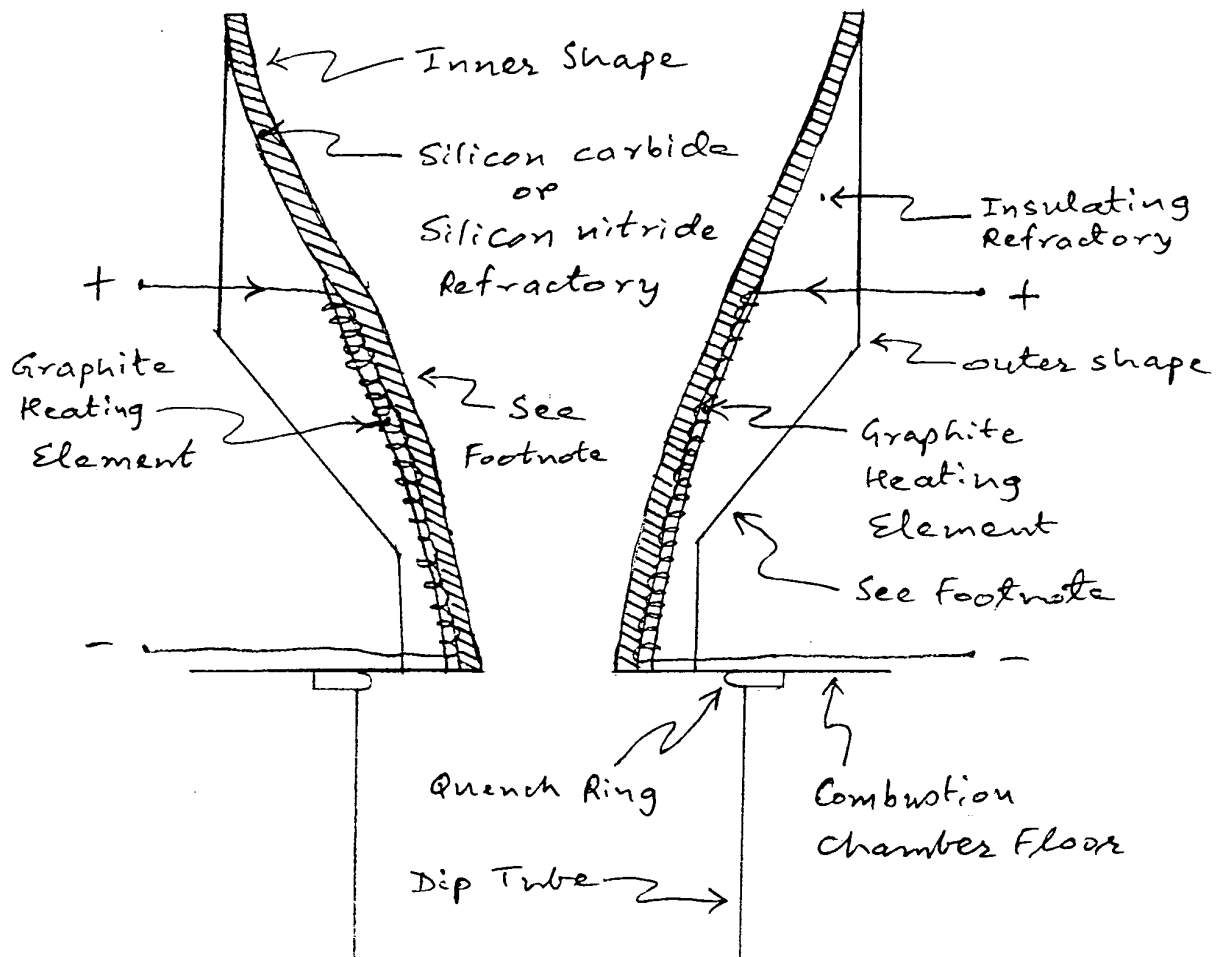


Figure 4
Details of the New Throat Design



Note: It is the inner shape of the throat that is important. The outer shape of the throat is not important.

Figure 5
New Combination Quench Gasifier

